# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TENNESSEE EASTERN DIVISION

J&S WELDING INC.,	)
Plaintiff,	)
	) Case No. 1:22-cv-01122
v.	)
	) JURY DEMAND
LIBERTY MUTUAL INSURANCE	)
COMPANY and WEST AMERICAN	) (Removed from the Gibson County Circuit
INSURANCE COMPANY,	) Court, Case No. H4227)
	)
Defendants.	)

# **DEFENDANTS' EXPERT WITNESS DISCLOSURES**

Pursuant to Rule 26(a)(2) of the Federal Rules of Civil Procedure and the Scheduling Order (D.E. 16), Defendant West American Insurance Company ("West American") and improperly named Defendant Liberty Mutual Insurance Company ("Liberty" and collectively with West America, the "Defendants") hereby give notice that they may call the following expert witnesses to testify at the trial in this case:

Michael Williamson
 Donan Engineering
 12450 Lake Station Place
 Louisville, KY 40299

Donan Engineering was retained to conduct an inspection and create a written report of its findings regarding alleged hail and wind damage at Plaintiff J&S Welding, Inc.'s ("J&S Welding") property located at 2579 North 9th Avenue, Humboldt, Tennessee 38343 (the "Property").

Michael Williamson is a forensic engineer at Donan Engineering. Mr. Williamson conducted an inspection of the Property on October 1, 2021 and prepared a Report of Findings dated October 6, 2021, which is attached hereto as **Exhibit 1**. Mr. Williamson is expected to testify as to his findings during the site inspection on October 1, 2021, the accuracy of the conclusions of

his expert report, his expertise, training, and credentials, as well as how his expertise, training and credentials inform and strengthen his conclusions. Mr. Williamson's *curriculum vitae* is attached hereto as **Exhibit 2**. The materials and information that Mr. Williamson consulted while preparing his report are listed in the sections entitled "Weather Data" and "Key Concepts" on p. 3-5 of **Ex.**1. Mr. Williamson charged \$170.00 per hour to West American for the site inspection and preparation of his expert report. Mr. Williamson will charge \$350.00 per hour for any time spent testifying at deposition or trial of this matter. To the best of Defendants' knowledge, Mr. Williamson has not testified at trial or deposition in any other cases during the last four (4) years.

Brian Moon, PE, MS (Engineering Management)
 EnVista Forensics
 565 Glenridge Connector, Suite 900
 Atlanta, Georgia 30342

Brian Moon, PE, MS (Engineering Management) YA Engineering Services Nashville, TN 615.839.8424

In addition to Donan Engineering, EnVista Forensics was retained to conduct an inspection and create a written report of its findings regarding alleged hail and wind damage at the Property.

At the time EnVista Forensics was retained in this case, Brian Moon was a project engineer at EnVista Forensics. Mr. Moon has since left his employment at EnVista Forensics and is presently employed as a Senior Associate at YA Engineering Services, working out of its Nashville, Tennessee office.

Mr. Moon conducted an inspection of the Property on August 9, 2022 and prepared a Report of Findings dated January 6, 2023, which is attached hereto as **Exhibit 3**. Mr. Moon is expected to testify as to his findings during the site inspection on August 9, 2022, the accuracy of the conclusions of his expert report, his expertise, training, and credentials, as well as how his expertise, training and credentials inform and strengthen his conclusions. Mr. Moon's *curriculum* 

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vitae is attached hereto as **Exhibit 4**. The materials and information that Mr. Moon consulted while preparing his report are listed in the section entitled "Documents Reviewed" on p. 3 of **Ex. 3**. To the best of Defendants' knowledge, Mr. Moon charged \$225.00 per hour to West American for the site inspection and preparation of his expert report. To the best of Defendants' knowledge, Mr. Moon will charge \$318.00 per hour for any time spent testifying at deposition or trial of this matter. Mr. Moon has not testified at trial or deposition in any other cases during the last four (4) years.

3. Tim Kelley
West Tennessee Restoration
126 Directors Row
Jackson, TN 38305

Tim Kelley of West TN Restoration was also retained to prepare an expert report and estimate related to the cost of repairs to the Property. Mr. Kelley conducted an inspection of the Property on August 9, 2022 and prepared a Report of Findings dated June 3, 2023, which is attached hereto as **Exhibit 5**. Mr. Kelley is expected to testify as to the information contained in his expert witness report including, but not limited to, repairs to the Property, the cost of such repairs, the costs of repairs that have not been completed, his findings during the site inspection on August 9, 2022, and the accuracy of the conclusions of his expert report and estimate, his expertise, and training. Mr. Kelley's *curriculum vitae* is included on p. 13-16 of **Ex. 5**. The materials and information that Mr. Kelley consulted while preparing his report are listed p. 1-2 of **Ex. 5**. Mr. Kelley charged \$150.00 per hour to West American for the site inspection and preparation of his expert report and estimate. Mr. Kelley has not testified at trial or deposition in any other cases during the last four (4) years.

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# Respectfully submitted,

/s/Brian C. Neal

Brian C. Neal (BPR #022532) Kate A. Hamilton (BPR #039331) BURR & FORMAN LLP 222 Second Ave. South, Suite 2000 Nashville, TN 37201

Telephone: (615) 724-3246 Facsimile: (615) 724-3346

Attorneys for Defendant West American Insurance Company and Improperly Named Defendant Liberty Mutual Insurance Company

### **CERTIFICATE OF SERVICE**

I hereby certify that on the 5th day of June 2023, a copy of the foregoing was served via email and/or 1st class U.S. Mail, postage prepaid, on the following:

Drayton D. Berkley, Esq. Berkley Law Firm, PLLC 1255 Lynnfield Ste. 226 Memphis, TN 38119 attorneyberkley@gmail.com P.O. Box 771048 Memphis, TN 38177

/s/Brian C. Neal

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### PREPARED FOR:

Ms. Elizabeth White **Liberty Mutual Insurance Company** P.O. Box 515097 Los Angeles, California 90051-5097

# JAND S WELDING INC

2579 NORTH 9TH AVENUE HUMBOLDT, TENNESSEE 38343 CLAIM NUMBER: 23930877

DONAN PROJECT NUMBER: 10-21090017-0

#### PREPARED BY:

DONAN ENGINEERING CO., INC.

12450 LAKE STATION PLACE LOUISVILLE, KENTUCKY 40299 800-482-5611

TENNESSEE BUSINESS LICENSE: 000406622 EXPIRATION DATE: APRIL 1, 2022

OCTOBER 6, 2021

MICHAEL D. WILLIAMSON, P.E.
FORENSIC ENGINEER
TENNESSEE P.E.: 119297
EXPIRES: AUGUST 31, 2022

John G. Donan, Jr., P.E. Chairman of the Board

J. Lyle Donan, P.E. President, CEO



CORRESPOND TO: Donan Engineering Co., Inc. 12450 Lake Station Place Louisville, Kentucky 40299 800-482-5611 502-267-6976 fax

October 6, 2021

Ms. Elizabeth White **Liberty Mutual Insurance Company** P.O. Box 515097 Los Angeles, California 90051-5097

RE: J and S Welding Inc.

2579 North 9th Avenue

Humboldt, Tennessee 38343 Claim Number: 23930877

Donan Project Number: 10-21090017-0

Dear Ms. White:

At your request, on October 1, 2021, a study was made on the buildings at the above-referenced address. The purpose of the study was to determine whether hail has functionally damaged the roof covering. Mr. William Griffin, a public adjuster, and representative of the owner, was present to point out areas of concern and to provide firsthand information. No videotaping of the inspection took place. This letter, with the enclosed photographs, is the report of my findings and conclusions.

# Description of Property

For purposes of this report, the main building is considered to face east toward North 9th Avenue (Photographs 1 through 4). The building is a single-story, steel-framed structure constructed over a concrete slab-on-grade foundation. The exterior walls are clad with metal, and the roof is covered with metal panels. A smaller building west of the main building faces north. The smaller building is also a single-story, steel-framed structure constructed over a concrete slab-on-grade foundation. The exterior walls are clad with metal, and the roof is covered with metal panels. The ages of the buildings are unknown.







# Background

Mr. Griffin said that the two building roofs were damaged by hail that fell on Humboldt, Tennessee, on May 3, 2020. He said that both roof's metal panel overlap sections were struck and dented by hail, rendering them vulnerable to water intrusion. Several employees in the shop pointed to areas where water had intruded into the main building. Those areas included the west wall above the electric service panel, the north wall beneath the fan, and a bucket on the southeast corner mezzanine, reportedly placed to catch water.

### **Observations**

The west wall insulation is ripped and deteriorated above the interior west wall electric service panel in the main building (Photograph 5). The plywood that the panel is attached to is stained. Ripped and deteriorated insulation is below a north wall mounted exhaust fan (Photograph 6). A bucket is positioned at the top of the mezzanine stairs (Photograph 7). The ceiling's insulation above the bucket is not torn or missing.

On the exterior of the main building dents about ½ inch wide are in the east side of an air conditioning window unit's fins (Photograph 8). A dent about ¾ inch wide is in the west siding of the main building (Photograph 9). Spatter marks between ¼ inch and ¾ inch wide are on the main building's north wall exhaust fan louvers and on the north side painted metal overhead door of the smaller building (Photographs 10 through 12).

One-inch wide dents are in the trim metal along the north roof rake of the main building (Photograph 13). Dents approximately <sup>3</sup>/<sub>4</sub> inch wide are in the metal panels of the roof (Photograph 14). Dents up to <sup>1</sup>/<sub>2</sub> inch wide are in the raised ribs of the roof (Photograph 15). No scratches or rusted surfaces accompany the indentations.

White and gray cracked sealant covers multiple seams at the north end of the main building's ridge (Photograph 16). A clear sealant is over multiple screw heads. Holes and cracks are in the sealant (Photograph 17). A raised screw is near the north rake near the ridge (Photograph 18). A missing screw head and a screw hole are along the west slope of this roof (Photograph 19).

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Several overlap areas of the main building's west slope's metal panels are lifted (Photographs 20 and 21). The lifted areas vary between 3 feet and 5 feet long.

Several holes with missing sealant are near the eave of the main building's east slope (Photographs 22 and 23). Multiple bright, shiny metal screws are adjacent to gray and rusted screws near the east eave (Photograph 24).

Dents approximately ½ inch wide are in the trim metal along the east rake of the small building (Photograph 25). Dents about ¾ inch wide are in the small buildings metal roof panels. No scratches or rusted areas are associated with these dents.

#### Weather Data

Historical weather data for the Humboldt, Tennessee area were reviewed for May 1, 2020, through August 30, 2020, using the National Oceanic and Atmospheric Administration's (NOAA) Storm Prediction Center (SPC) and Storm Events Database (SED). The SPC reports tornadoes, hail (i.e., 1-inch diameter and greater), and wind (i.e., 58 miles per hour and greater) events throughout the continental United States. Table 1 lists 1.25-inch hail on May 3, 2020, which reportedly fell about 9 miles from the subject property. 1.75-inch hail is reported to have fallen on May 4, 2020, approximately one mile from the property.

Date	Hail Size (inches)	Distance from Property to Event (miles)	Direction from Property to Event	Source
May 04, 2020	1.75	1.16	172 degrees south	SED
May 03, 2020	1.25	9.11	300 degrees west northwest	SED
May 04, 2020	1.00	1.16	172 degrees south	SED
May 04, 2020	1.00	8.93	106 degrees east southeast	SED
May 03, 2020	0.75	8.93	106 degrees east southeast	SED

Table 1: Hail Events Within 10 Miles of Subject Property (35.83662, -88.92283) for the Period 5/1/2020 to 8/30/2020

# Key Concepts

# Collateral Indicators of Hail Impact

Collateral indicators of hail impact include, but are not limited to, exterior metal appurtenances, exterior wood surfaces, window wraps, and screens; heating, ventilating, and air conditioning (HVAC) condenser fins; and metal roof appurtenances such as vents and various caps. Collateral indicators of hail impact are extremely important in any hail study, as they provide clear and tangible clues about the nature of the hailstorm, such as the size of hailstones, the direction from which the hailstones originated, and the density or number of hailstones that fell per unit area.

Many factors should be considered when estimating the size of hail that impacted a property, including the gauge (thickness) of the metal, the angle of impact, the speed of impact, and the hardness of the hailstone. However, laboratory tests allow us to estimate the size of hail based on on-site collateral indicators.<sup>1</sup> In general, dents in light-gauge metals, such as the furnace vent caps, can be up to three times larger than the actual hailstone, whereas dents in heavier-gauge metals can be as small as half the size of the impacting hailstone.

# Metal Roof Panel Hail Damage Defined

Underwriters Laboratory, using the *UL 2218 Hail Impact Resistance of Prepared Roof Coverings and Materials* test procedure, evaluates the hail impact resistance of roofing materials. Functional hail damage is defined as evidence of fracture, splitting, or any other failure that would result in an opening of the roofing materials.

Metal roof systems have good hail impact resistance without resulting in functional damage. The metal panels can be vulnerable to aesthetic damage, since hail can cause permanent indentations in the roofing panels.<sup>2</sup>

Metal roof systems are rarely damaged by hail to the point that roof leaks occur. Damage to metal roofs due to hail is primarily a cosmetic issue. Large hail will dent metal roof panels and trim. If the metal is installed in a highly visible location, such as a mansard, cosmetic dents may become objectionable.

<sup>&</sup>lt;sup>1</sup> Vickie Crenshaw and Jim D. Koontz, "Hail: Sizing It Up!". Western Roofing Magazine, May/June 2002.

<sup>&</sup>lt;sup>2</sup> Courtesy United States Steel Corporation, Technical Construction Bulletin TBP 2005.17 – Hail Damage On Coated Sheet Steel Roofing.

#### **Conclusions**

Based on the study of the collateral indicators, hail up to one inch in diameter fell at this site. A study of weather data indicates that hail between 1 inch and 1.75 inch fell during May 2020.

The roof covering is not scratched or rusted at the dent locations. The dents are due to hail strikes, but the damage is cosmetic in nature. The functionality of the roof has not been affected by the hail. Further, hail impacts would not result in the 3 foot to 5-foot long lifting of the overlap seams as is present on the main building. The lifted panels are the result of deferred maintenance. The leaks are due to missing screws and degraded sealant on the roof.

# Summary of Conclusions

In summary, based on what is known at this time, I am of the opinion that:

- The dents in the metal roof covering are due to hail strikes. The damage is cosmetic in nature and has not affected the function or longevity of the roof.
- The leaks are due to missing screws and degraded sealant unrelated to any hail event.

This report is based on information known to Donan at the time the report is issued. Donan reserves the right to amend or supplement this report if additional relevant information becomes available.

If you have any questions or concerns, or need additional assistance on this project, please email donan@donan.com, as this will ensure a prompt response to your request. We appreciate your confidence in our professional services.

Sincerely,

DONAN ENGINEERING CO., INC.

Michael D. Williamson

2021.10.06 09:11:11-05'00

Michael D. Williamson, P.E. Forensic Engineer

Tennessee P.E.: 119297

Expires: August 31, 2022

October 6, 2021



Photograph 1: Building facing east.



Photograph 2: North side of building.



Photograph 3: West side of building.



Photograph 4: North side of smaller building.



Photograph 5: Deteriorated insulation and stained wood at west side electric panel.



Photograph 6: Deteriorated insulation on north wall.



Photograph 7: Bucket on mezzanine at southeast corner of shop.



Photograph 8: Dents in east side air conditioning fins.



Photograph 9: Dent in west wall siding.



Photograph 10: Spatter on north wall.



Photograph 11: Spatter on north wall louvers.



Photograph 12: Spatter on smaller building north side door.



Photograph 13: Dents in north end roof trim metal.



Photograph 14: Dents in roof covering.



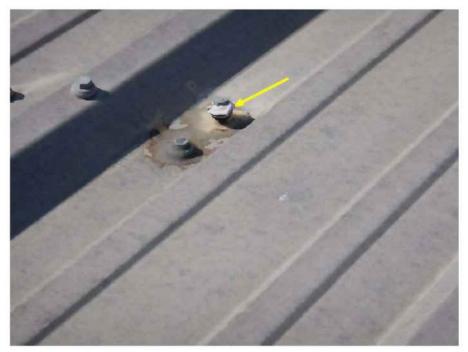
Photograph 15: Dent in rib metal.



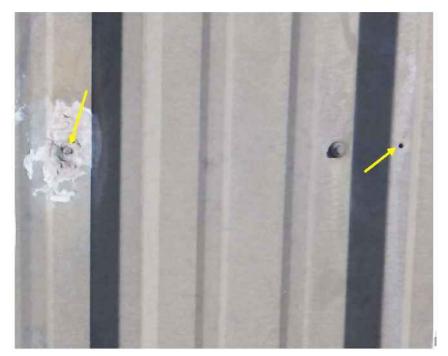
Photograph 16: Sealant at north end of ridge.



Photograph 17: Cracks and holes in sealant.



Photograph 18: Raised screw at north end of roof.



Photograph 19: Missing screw head and missing screw on west slope.



Photograph 20: Lifted lap on west slope.

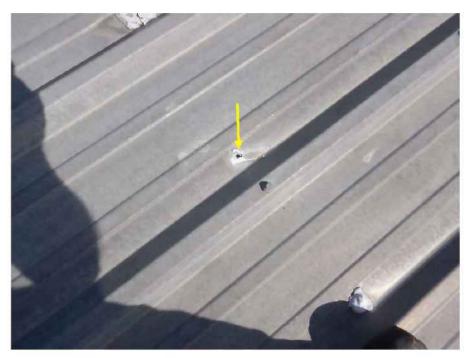




Photograph 21: Lifted lap on west slope.



Photograph 22: Hole near east eave.



Photograph 23: Screw hole near east eave.



Photograph 24: Bright screw heads near east eave.



Photograph 25: Dents in east side trim metal of smaller building.



Photograph 26: Dent in north slope of smaller building roof.



# PROFESSIONAL PROFILE

# Michael Williamson, P.E.

Forensic Engineer 800-482-5611 Ext: 1228 mwilliamson@donan.com

Based Out Of: **Tennessee**Send Correspondence To: **12450 Lake Station Place**Louisville KY, 40299

# **BIOGRAPHY**

Mr. Williamson joined Donan in 2016 and currently serves as a Forensic Engineer based out of the firm's Memphis, Tennessee office. He began his engineering career in 1995 and has worked in the following industries: civil, construction, forensic, utility, and water resources engineering. Michael has previous experience serving as a design engineer and his areas of expertise are hydraulic machinery and systems, plumbing failures, storm and waste water, and utility design/construction, among others.

He is a licensed professional engineer in Alabama, Arkansas, Florida, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Tennessee, and Texas. He holds a Bachelor of Science degree from the University of Mississippi in Civil Engineering.

# REPRESENTATIVE EXPERTISE

Hydraulic Machinery and Systems Plumbing Failures

Storm and Waste Water
Utility Design/Construction

# **CERTIFICATIONS & LICENSES**

Professional Engineer, Alabama

Professional Engineer, Arkansas

Professional Engineer, Florida

Professional Engineer, Kentucky

Professional Engineer, Louisiana

Professional Engineer, Mississippi

Professional Engineer, Missouri

Professional Engineer, North Carolina

Professional Engineer, Tennessee

Professional Engineer, Texas

# **AFFILIATIONS**

American Society Of Civil Engineers (ASCE)

# **EDUCATION**

1999 University of Mississippi

Bachelor of Science, Civil Engineering

1987 Georgia State University

Bachelor of Science, Psychology

# RELEVANT EXPERIENCE

2016 - Present DONAN

Memphis, TN

Forensics Engineer

2015 - 2016 Civil Link

Southaven, MS

Design Engineer

2008 - 2015 Neel Schaffer

Southaven, MS Project Manager

2006 - 2008 Russell & Company

Hernando, MS Design Engineer

1998 - 2006 Elliott & Britt Engineering

Oxford, MS

Engineer/Project Manager

Exhibit 2



# REPORT OF FINDINGS

# J AND S WELDING INC

Burr Forman Claim No: 23930877 Envista Matter No: MAT-141908-G4Z7 REPORT DATE: January 6, 2023

Prepared For:

Ms. Kate Hamilton

Burr Forman

222 Second Avenue South, Suite 2000

Arlington, Virginia 22209

01/06/2023

khamilton@burr.com



#### **BACKGROUND**

On August 9, 2022, Brian Moon, P.E. of Envista Forensics (Envista) inspected the property of J and S Welding Inc located at 2579 North 9th Avenue in Humboldt, Tennessee (the building). The building consisted of a steel framed, single-story structure. The exterior walls of the building were clad with metal siding and the gable type roof was covered with metal panels. According to the Gibson County, Tennessee Property Assessor's office, the building was constructed in 1988. For the purposes of discussion within this report, the front of the building was considered to face east towards North 9th Avenue (Attachment A, Photographs).

Reportedly, the roof covering, and metal wall siding was damaged by a hail event on or around August 21, 2020.



Figure 1: 2579 North 9th Avenue in Humboldt, Tennessee from CONNECTExplorer

### **PURPOSE**

Burr Forman retained Envista to determine if the roof covering and metal wall panels were damaged as a result of a hail event on or around August 21, 2020.

### **CONCLUSION**

The metal panel roof covering, and wall siding was damaged as a result of multiple hailstorms. However, the damage (roughly circular indentations) will not affect the functionality or longevity of the roof covering and wall siding.



#### **DOCUMENTS REVIEWED**

The following documents and materials were reviewed and/or referenced as part of Envista's investigation, and/or contain information pertinent to the discussion and conclusions presented herein:

- CONNECTExplorer aerial imagery, URL: https://explorer.pictometry.com/login.php.
- 2. Hail Damage Threshold Sizes for Common Roofing Materials prepared by Timothy P. Marshall, Richard F. Herzog, Scott J. Morrison, and Steven R. Smith, Haag Engineering Co. Dallas, Texas for 21st Conference on Severe Local Storms (C. 2002).
- 3. Evaluation of Hail-Strike Damage to Asphalt-Composition Shingles Based on Hailstone Size, Roof Pitch, Direction of Incoming Storm, and Facing Roof Elevation authored by Stephen Petty, PE, CIH, Mark Petty, and Tim Kasberg and dated 2009.
- 4. Crenshaw, V. and J.D. Koontz, "Hail: Sizing it Up!", URL: http://jdkoontz.com/articles/hailsize.pdf, 2010
- 5. Dents in Metal Roof Appurtenances Caused by Ice Ball Impacts by Scott J. Morrison, P.E., Haag Engineering Company in Carrollton, Texas (document is undated).
- 6. East, B., Lozos, T., Verhulst, S., DeLeon, M., and Ahuja, D. (2012) Guidelines to Assess Hail Damage to Shingle Roofs. Forensic Engineering 2012: pp. 169-178. Proceedings of the Sixth Congress on Forensic Engineering, held in San Francisco, California, October 31-November 3, 2012. Sponsored by the Technical Council on Forensic Engineering of ASCE.
- 7. Donan Engineering Co, Inc., Forensics Engineering Report, Donan Project Number: 10-2190017-0, dated October 6, 2021.
- 8. CompuWeather, Hail Trail Report, dated August 24, 2022.

#### PROVIDED INFORMATION

Envista sent interview questions to Kate Hamilton (Attorney at Burr & Forman, LLP) prior to the site inspection. Kate Hamilton has issued written discovery in which the Plaintiff's counsel has not responded to; therefore, the interview questions have not been answered. It is Envista's standard protocol to perform an interview with J&S Welding Inc., prior or during Envista's site inspection and prior to drafting the structural report. Envista reserves the right to a supplemental report with the interview questions answered at a later time. Liberty Mutual has submitted a Motion to Compel pending, to require the Plaintiff to respond to the discovery requests.



#### DISCUSSION

Reportedly, the roof covering, and metal wall siding was damaged by a hail event on or around August 21, 2020.

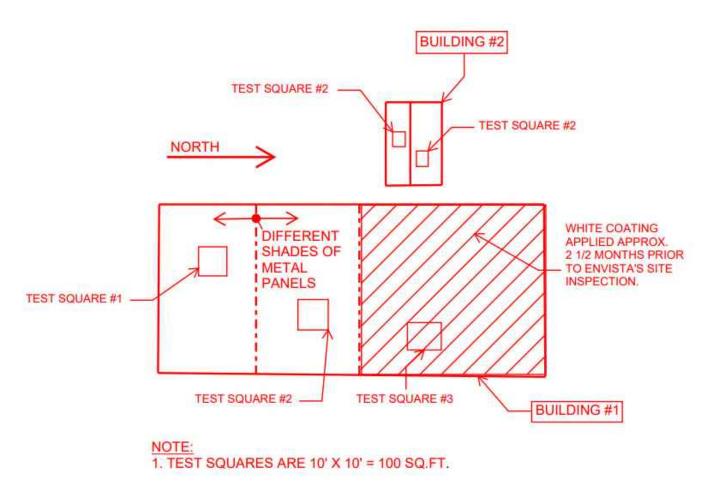


Figure 2: Roof Plan (Not to Scale)

#### Hail Damage

Envista inspected the building exterior and surrounding elements (wall siding, gutters, downspouts, HVAC condenser fins, etc.) for evidence of exposure to hail. Envista's inspection of the property found a presence of blemishes/dents/indentations to light gauge metal appurtenances (gutters, downspouts, wall siding, etc.). Envista found roughly circular indentations on the wall siding, gutters, roof vents, downspouts, and HVAC condenser fins. The indentations were a maximum size of approximately 9/16-inch in diameter. Exposure of a structure to a hailstorm typically results in spatter marks in oxidized surfaces which are temporary aesthetic blemishes/markings created by hailstone impacts that scour the surface relatively cleaner than the surrounding materials that fade over time. Envista observed spatter marks on the surrounding elements. It is Envista's experience that spatter marks dissipate within a year. If hail had impacted the property, it would have been expected that indentations or spatter marks would be observed to the surrounding elements. Given the hailstorm reportedly occurred over approximately 2 years ago, Envista would not be expected to see spatter marks. Envista observed indentations and spatter marks on the north and east building elevations.





Therefore, Envista's observations indicated the surrounding elements of the building exterior had been exposed to roughly 9/16-inch diameter hail. The exposure of hail to the north and east building elevations suggests the building was exposed to multiple hail events.

Envista inspected the metal panel covering for evidence of hail damage. A close-up inspection of test areas was performed on the roof (in each cardinal direction) following the customary protocol in the engineering profession for roof examinations. Envista inspected test squares to evaluate the frequency, if any, of damage consistent with hail on each roof facet. Decades of field investigation experience have shown that hail falls randomly, and that an examination of a randomly selected roofing square on unobstructed roof exposures in each of the cardinal directions is a representative indicator of the hail strikes over an entire roof exposure. Where applicable, potential shielding by adjacent trees or structures was considered and avoided in the selection of the test square locations.

Envista inspected the metal wall siding and the metal panel roof covering for evidence of hail damage. Envista's inspection revealed roughly circular indentations in the roof covering and wall siding (north and east elevations) for building #1 and building #2, see Figure 2. The north half of building #1 was covered with a white surface coating. Therefore, no indentations, chipping or delamination of the surface coating at the indentations, disengaged panel laps, and/or punctures or tears through the metal were observed.

Hail damage to a metal panel roof can generally be defined as chipping or delamination of the surface coating at indentations, disengaged panel laps, and/or punctures or tears through the metal. Indentations in the metal components without associated surface coating damage or ruptured metal would constitute damage that would not affect the functionality or longevity of the materials. However, Envista's observations indicated a presence of roughly circular indentations without surface coating damage or ruptured metal, which was consistent with the roof covering having been damaged by hail. Therefore, Envista concluded that the metal panel roof covering, and wall siding was damaged as a result of multiple hailstorms. However, the damage (roughly circular indentations) will not affect the functionality or longevity of the roof covering and wall siding.

Attachment A, Photographs contains photographs relevant to this discussion.



#### **CLOSURE**

This report is for the exclusive use of our client and is not intended for any other purpose. Our report is based on information made available to us at this time. Should additional information become available, we reserve the right to determine the impact, if any, of the new information on our opinions and conclusions and to revise our opinions and conclusions if necessary and warranted by the discovery of additional information.

**Envista Forensics** 

Brian Moon, P.E. Project Engineer

Technical Review by: Stephen G. Sheffield, P.E. (Florida) Senior Project Engineer

Slew & Shi

Attachment A, Photographs

Attachment B, CompuWeather Hail Trail and Weather Summary Report



### **ATTACHMENT A**

# **Photographs**

Photographs taken during our inspection, which have not been included in this report, have been retained in our files and will be made available to you upon your request. Note that the brightness and/or contrast of some photographs may have been enhanced for purposes of clarity. Some photographs may be cropped from their original sizes in order to emphasize a specific item or feature. No significant changes to any photographs were made that would alter factual representations.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

# Photograph 1.



View of the front of the building facing east toward North 9<sup>th</sup> Avenue.

# Photograph 2.



View of an overhead door.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

# Photograph 3.



View of an overhead door with spatter marks for building #2.

### Photograph 4.

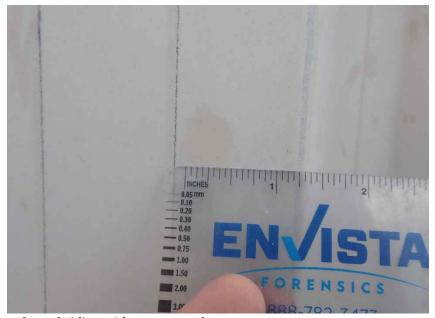


View of building #2.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

# Photograph 5.



View of metal siding with spatter marks.

### Photograph 6.



View of roughly circular indentations in metal siding.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

# Photograph 7.



View of roughly circular indentations in metal siding.

### Photograph 8.

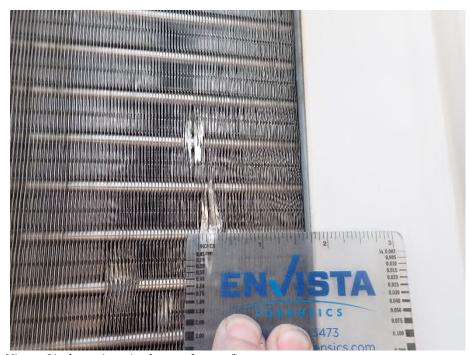


View of indentations in the condenser fins.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 9.



View of indentations in the condenser fins.

#### Photograph 10.



*View of test square #1.* 



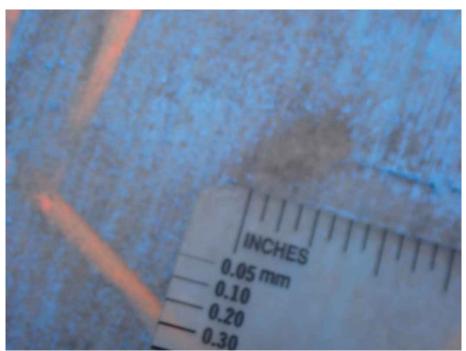
Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 11.



View of sealant material covering a fastener.

#### Photograph 12.

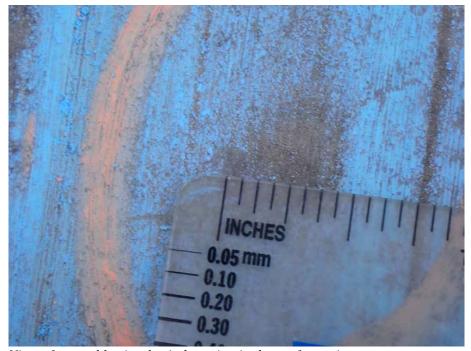


View of a roughly circular indentation in the roof covering.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 13.



View of a roughly circular indentation in the roof covering.

#### Photograph 14.



View of a roughly circular indentations in the roof covering.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 15.



View of a roughly circular indentation in the roof covering.

#### Photograph 16.

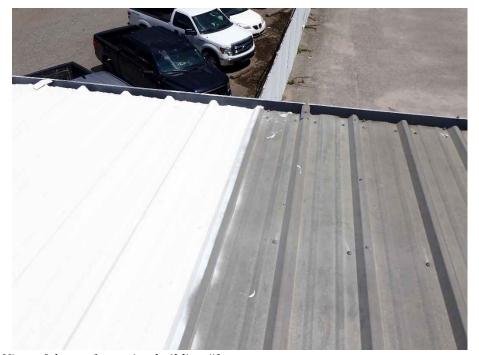


View of the roof covering building #1.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 17.



View of the roof covering building #1.

#### Photograph 18.



View of a missing fastener.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 19.



View of withdrawn fastener.

#### Photograph 20.

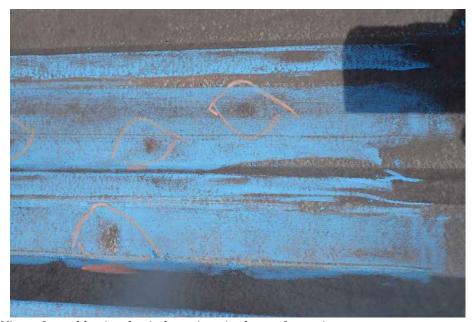


View of withdrawn fastener.



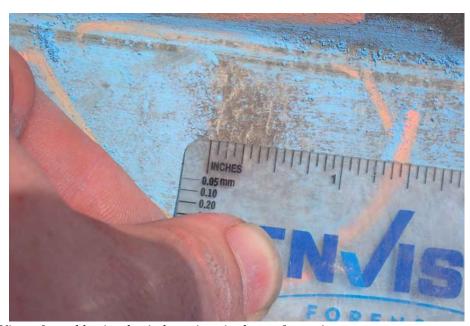
Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 21.



View of roughly circular indentations in the roof covering.

#### Photograph 22.



View of roughly circular indentations in the roof covering.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 23.



View of white coating on approximately half of the north roof covering for building #1.

#### Photograph 24.



View of roughly circular indentations in gas vent cap.



Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 25.



View of roughly circular indentations in gas vent cap.

#### Photograph 26.



View of test square #1 for building #2.



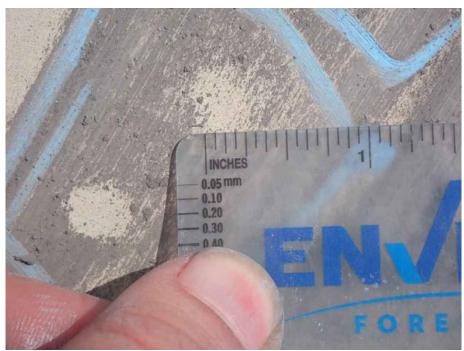
Envista Matter No: MAT-141908-G4Z7 Burr Forman Claim No: 23930877

#### Photograph 27.



View of roughly circular indentations in metal roof covering for building #2.

#### Photograph 28.



View of roughly circular indentations in metal roof covering for building #2.



# **ATTACHMENT B**

# **COMPUWEATHER HAIL TRAIL AND WEATHER SUMMARY REPORT**

# HAIL SEARCH PLUS



PREPARED FOR:

# **Envista Forensics**

**Brian Moon** 

August 24, 2022

J and S Welding / 23930877





#### **PROJECT INFORMATION**

Report Completion Date: August 24, 2022

Prepared for: Envista Forensics

2310 Grassington St.

Murfreesboro, TN 37128

Attn: Brian Moon

Case Reference: J and S Welding / 23930877

Period of Study: August 1-31, 2020

Location of Incident: 2579 N. 9th Avenue, Humboldt, TN 38343

Type of Incident: Hail

Scope: Hail Search

#### **ABSTRACT**

Envista Forensics has requested a site specific hail analysis for August 1-31, 2020 in the vicinity of 2579 N. 9th Avenue, Humboldt, TN 38343. Available weather data from approved sources for the surrounding area were analyzed to determine conditions that took place for the requested location during the period requested.

The results of the enhanced radar analysis show no dates with hail larger than 0.5 inch diameter at 2579 N. 9th Avenue, Humboldt, TN 38343 during the period August 1-31, 2020. A review of observed hail reports found no reports of hail within 25 miles of the location.

This report is derived by analyzing information from various sources, including the National Weather Service (NWS), the Storm Prediction Center (SPC) and the National Centers for Environmental Information (NCEI), Internet feeds, video feeds, and other sources. The data compiled represents the best approximation of hail for the date and time of the analysis. Actual storm report plots are derived from the latitude and longitude received from the NWS and SPC and may not be the exact location of the damage reported. Our research team has examined all available sources to ensure the accuracy of the report; however, we cannot be responsible for malfunctions or inaccurate data received from the NWS or NCEI. When applicable, a report may be repositioned to the exact location when an exact location of the report can be determined. There are no implied guarantees of any damage caused by hail or storms we analyze and report on. Storm reports plotted in our reports are based on site specific field submissions and may not represent the average or largest hail that occurred in the vicinity.



#### RADAR ENHANCED HAIL SEARCH RESULTS

Period of Analysis: August 1-31, 2020

Location: 2579 N. 9th Avenue, Humboldt, TN 38343

Case Reference: J and S Welding / 23930877

The following hail analysis was performed with state of the art meteorological technology allowing for individual thunderstorms to be reviewed and analyzed to determine the presence and size of hail. This technology uses a combination of Doppler radar and weather models to determine hail presence without relying strictly on witness reports, and detects hail events at all times including when no witnesses were present. This enhanced technology estimates the hail size at the location and within 1 mile and 3 miles of the location, and limits results to hail larger than 0.5-inch diameter. Utilizing both the radar technology and observed hail reports is a comprehensive approach to hail verification. Note that the dates below begin at 6 AM CST on the indicated day and end at 6 AM CST the following day.

Estimated Maximum Hail Size (inches)







DATE	AT LOCATION	WITHIN 1 MILE	WITHIN 3 MILES					
There were no radar-detected hail events within 3 miles								



#### **OBSERVED HAIL REPORTS – WITHIN 25 MILES**

Period of Analysis: August 1-31, 2020

Location: 2579 N. 9th Avenue, Humboldt, TN 38343

Case Reference: J and S Welding / 23930877

The following table indicates a listing of observed reports of hail within 25 miles of 2579 N. 9th Avenue, Humboldt, TN 38343. They are based on information gathered from the National Weather Service (NWS), the Storm Prediction Center (SPC) and the National Centers for Environmental Information (NCEI), Internet feeds, video feeds, and other sources. The data compiled represents the best approximation of hail for the date and time of the analysis. Utilizing this information in conjunction with the radar enhanced search results provides a more comprehensive approach to verifying hail events. Indicated below are the distance between the incident location and the hail report, the size of the hail (inches in diameter), date, time (local time) and location of the report, as well as the source of the report and remarks.

#### BY DATE AND TIME - 0 REPORTS:

Dist (mi)	Size (in)	Date	Time	City	ST	County	Source	Remarks			
THERE WERE NO OBSERVED REPORTS OF HAIL WITHIN 25 MILES											

# CompuWeather, Inc.

tel: 800-825-4445 fax: 800-825-4441

experts@compuweather.com www.compuweather.com

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# Brian Moon PE, MS Senior Associate

**Department** Engineering

Tel: (615) 839-8424

Email: brian.moon@yaeservices.com

**Locations**Nashville, TN

# **Biography**

Brian Moon is a registered Professional Engineer with more than 10 years of consulting experience. Mr. Moon has comprehensive knowledge of design standards and codes across the United States. Mr. Moon regularly assists clients with both the design and forensic aspects of engineering. Mr. Moon has experience evaluating construction defects, structural failures, building enclosures, water intrusion, foundations, and damage resulting from extreme weather events and natural disasters (e.g., hurricanes, tornados, earthquakes, and fires.).

#### **Education**

- Tennessee Technological University | Cookeville, Tennessee
   Bachelor of Science Civil Engineering (Structural)
- Lipscomb University | Nashville, Tennessee
   Master of Science Engineering Management

# **Professional Experience**

- 2023 Current | Senior Associate | YA Engineering Services
- 2021 2023 | Project Engineer | Envista Forensics
- 2020 2021 | PE Exam Question Book Reviewer and Editor | School of PE
- 2020 2021 | Regional Engineering Manager | Oldcastle Infrastructure
- 2020 2020 | Structural Engineer, E4 | SSOE Group
- 2018 2020 | Structural Engineer | Barge Design Solutions
- 2013 2018 | Structural Engineer, E3 | SSOE Group
- 2013 2013 | Engineering Internship | Honeycutt Engineering

#### **Areas of Practice**

- Building Code Upgrade Review
- Building Envelope
- Condition Assessment
- Construction Administration
- Damage Assessment
- Earthquake Engineering
- Failure Analysis
- Infrared Thermography
- Litigation Support
- Repair and Rehabilitation Design
- Roofing
- Seismic Evaluations and Retrofit Design
- Seismic Risk Assessment
- Structural Analysis

### **Representative Consulting Assignments**

United Launch Alliance | Commercial & Public Buildings
 Decatur, AL | Designed 5 concrete mat foundations in an existing building



- for heavy tooling equipment using finite element models. The other project responsibilities included checking shop drawings, answering RFIs, and checked local code requirements.
- United Launch Alliance | Commercial & Public Buildings
   Decatur, AL | This ULA project included a truss study for a new 10-ton bridge crane that clamps to the bottom chord of existing trusses. The study was completed, and recommendations were made to the owner. The second phase included truss reinforcement, checking/designing the connections from the runway beam to bottom chord connection. Direction an oversight was given to drafting to get the structural drawings completed.
- Phillips Printing Company | Tornado
   Nashville, TN | Assessed and documented Tornado building damage for a pre-engineered metal building in downtown Nashville.
- Toyota Manufacturing | Commercial & Public Buildings
   San Antonio, TX | Oversaw construction activities which included steel erection sequencing installation for the Forma building expansion, oversaw slab on grade pours for the weld, stamping and forma expansions (performed pre-pour inspections). Responded to contractor RFIs, identified and fixed field issues, gave PowerPoint presentation to Toyota and the onsite contractors providing guidance on slab on grade pour expectations/ previous lessons learned.
- Tesla | Commercial & Public Buildings
   Austin, TX | Worked on delegated portions of the overall design for the new general assembly facility from the structural lead engineer for the Tesla bldg. expansion in TX. Worked on designing large mezzanine structures which included vibration analysis. Also, designed the building moment connections for the general assembly building and the exterior stair shaft tower structural framing.
- University Academy | Hurricane
   Panama City, FL | Performed a site visit to assess the structural damage after Hurricane Michael. The existing structural drawings were not found by the owner. So, the existing structure was described in report format as steel-framed, using hot-rolled wide flange beams and columns. Lateral stability and lateral load resistance were provided by semi rigid frames with bolted end- plate connections, etc. To summarize, a structural assessment report was written advising the owner the extent of structural damage for an existing school building.
- United Launch Alliance | Commercial & Public Buildings
   Decatur, AL | Designed 6 large reinforced concrete Mat foundations supporting process equipment and platforms. The mat foundations were designed for a very small differential settlement to ensure equipment levelness stays in tolerance. The equipment wheel (live loads) were placed in different load patterns along the mat to ensure the worst-case design forces were being considered. In addition, the existing slab was checked to ensure it could take the heavy wheel loads when off the mat foundations.
   Design drawings, calculations and specification were developed.
- General Motors | Commercial & Public Buildings
   Ramos, Mexico | Structural Design Lead for General Assembly Building
   and GA Seat and Delivery BuildingResponsibilities: Designed the general
   assembly building and GA seat and delivery building expansion. The
   building was comprised of brace frames in one direction and moment
   frames in the other direction. The roof framing consisted of truss framing for
   both buildings. The intermediate floors were non-composite framing. Also,
   coordinated with other disciplines.



#### **Credentials**

- PE | Professional Engineer
- MS | Masters of Science Engineering Management
- FAA Part 107 Certification

#### Licenses

- Alabama | 38642 | Professional Engineer (Structural)
- Arkansas | 21516 | Professional Engineer
- Kentucky | 36290 | Professional Engineer (Structural)
- Louisiana | 47408 | Professional Engineer (Structural)
- Tennessee | 119782 | Professional Engineer (Structural)
- Florida | 96071 | Professional Engineer (Structural)
- Mississippi | 34048 | Professional Engineer (Structural)



#### June 3 2023

I was contacted by Brian Neal with Burr and Forman LLP about inspecting a property located at 2579 North 9<sup>th</sup> Avenue Humboldt TN 38343. The Property is owned by J&S Welding, Beau Eddings. The property had a hail claim, with a date of loss of 8/21/2020. I was also asked to write a report and to testify as an expert witness if necessary. The inspection was scheduled for 8/9/2022 at 1:00 PM. On the day of inspection I arrived at the Business about 20 mins prior to the appointment time.

A resume with certifications and training that allow me to do inspections and prepare estimates has been provided. Those certifications are as follows.

General Contractor's License # 72980. In order to attain a general contractor's license you have to pass a business and law exam, the appropriate trade exams, back ground checks, you have to be able to show significant hands on experience in the trades you are trying to be licensed in and possibly provide an audited financial statement. My exam covered multiple trades. My license covers the repair or ground up building of residential, commercial or industrial projects, \$500,000 or less, total project cost.

In order to do the inspection and report I was provided with the following Documents.

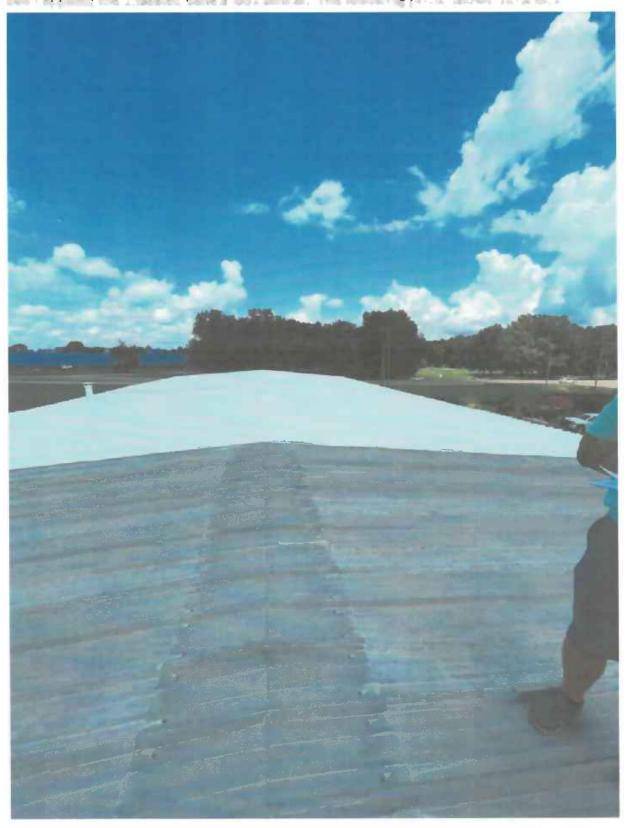
- Liberty Mutual estimate with a total RCV amount of \$57,189.88 and is dated as estimate completed on 8/25/2021 at 12:08 AM.
- William Griffin estimate with an RCV amount of \$245,079.25 and is dated as estimate
   Entered 6/25/2021 11.13 PM. The estimate also has a two page email attached to it

- sent by William Griffin to Louis Ugalde and Beau Eddings and a sworn statement in proof of loss signed by Beau Eddings, notarized and dated 8/7/2021.
- William Griffin estimate with a total RCV amount of \$501,684.93, other structures RCV amount of \$7,040.16, Summary for contents RCV amount of \$60,200.00 and 23 pages of photos attached.
- I received 11 pages of photos with a Hancock documents email as cover sheet.
- I received a packet with multiple pages. It appears to explain the coverage of the insured and an explanation of the loss. It has a Sedgwick logo at the top and Attention Ugalde JR, Louis listed on the front page.
- I received 9 pages of email sent from and to Larry Ransom and William Griffin.
- I received a Donan Engineering report.
- I received 128 pages of photos. It is unknown who took the photos.

On the day of inspection we started with the roof. The property has one main building and a small storage shed/building directly behind it when looking at the structures from the parking lot. Both structures are covered with metal panels. I will refer to the main building as building one and the small building as building two.

The roof of the building one is a commercial PBR metal panel. These panels are typically around 24 gauge. A portion of the building has had a sealer applied to the metal panels. This sealant prohibits my ability to properly inspect the metal panels. The portion of the building without sealer is owned by someone else beside J&S Welding. Even though the sealer has

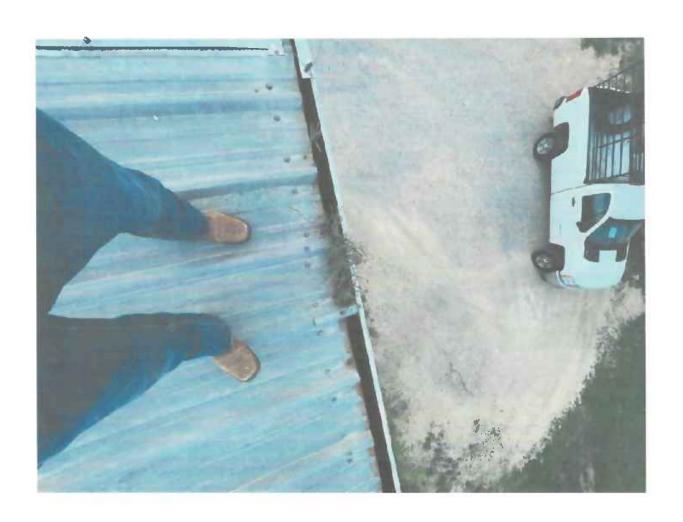
been applied, the unsealed panels look similar. The following photo shows the sealer.



The portion of the building without sealer has multiple issues. These issues are a result of deferring maintenance. The roof has multiple locations with screws missing that leave holes through the metal roofing exposed that will cause leaks. It has multiple places that gutters need to be cleaned out to the point that weeds/grass have started to grow. If gutters do not drain properly it can cause water to back up and leak into the interior space. The following pictures show some of the issues. Building one also has some ribs located on the metal panels that have been creased or bent. The ribs of the metal panels are the portion of the panel that extends upwards from the roof deck. The bent ribs do not appear to be a result of hail damage. The creases are more of a straight line. These typically happen during manufacturing, installation or from the roof being walked on. Some of the creases appear to have been welded at some point or had a sealer put on them.

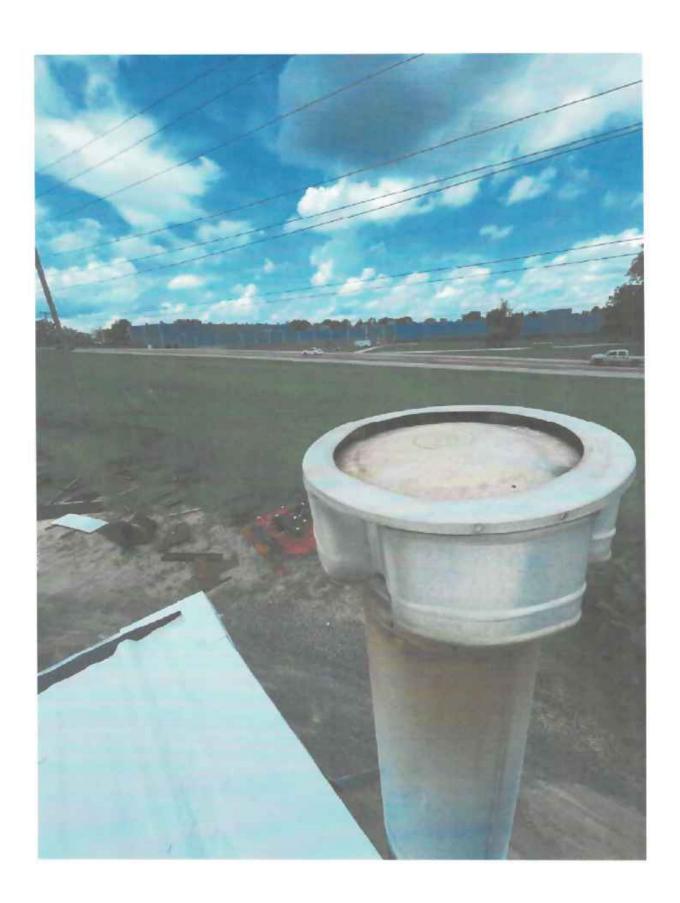




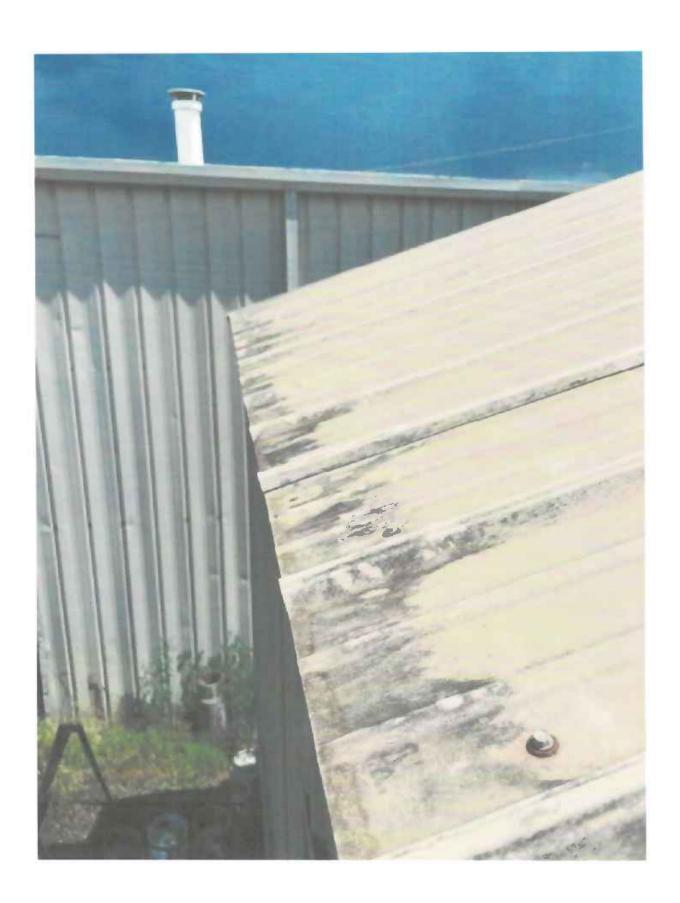




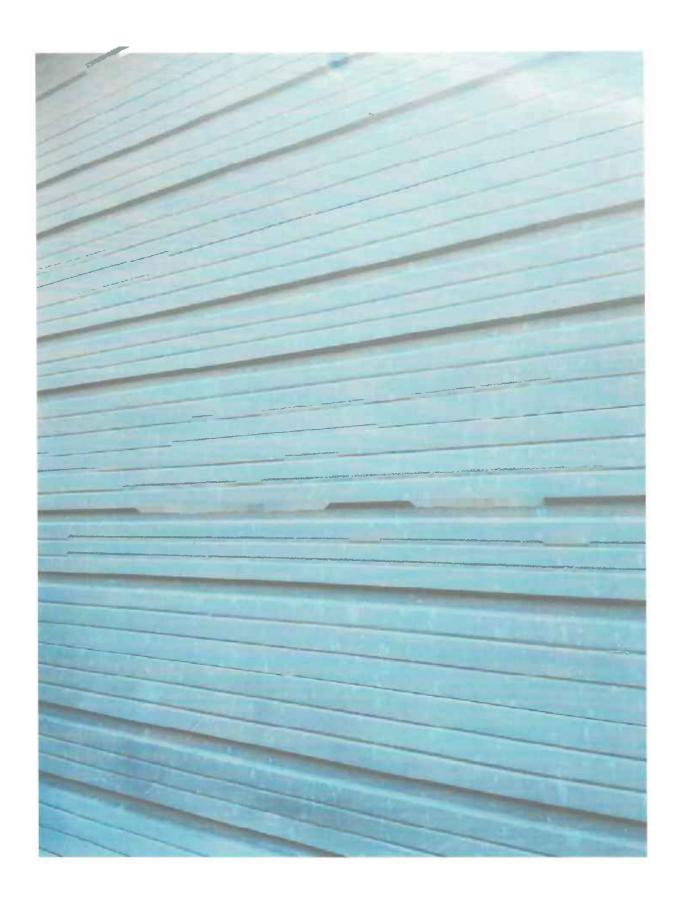
Hail damage to the roof was observed but so minor in nature that it does not appear in photos nor would it effect the functionality of the roof. It is my opinion that any leaks on the roof of the main building would be caused by maintenance issues and not hail damage. The soft metal aluminum vents show very minor hail damage. Typically with these being a softer metal they show more damage than the steel roofing. The vent is shown in the following photo.



Building two has a different metal panel. The type of metal panel on building two is typically around 29 gauge. It was easier to see half damage on the roof of building two but again no half damage was observed that would affect the functionality of the roof. Building two was free of the maintenance issues observed on building one. The following photo shows half strikes on Building two.



Both building one and two have a similar metal panel on the walls. Both buildings have hail damage to the trim metal, garage doors and metal wall panels. The garage door of building two is the worst I observed on the day of my inspection. It is shown in the following photo.



The following section is an explanation of my estimate with a total RCV of \$55,311.71 and Liberty Mutual estimate with a total RCV 57,189.88. Both estimates are very similar. The Liberty estimate is written in manner of what we typically see when we repair structures that are constructed in the same way as the J&S welding structure. It has all of the associated line items that are seen time and time again when repairing these types of structures. The biggest change I made was the type of lift used to access the elevated areas of the structure. I do not believe it would be safe to use a scissor lift unless the ground is flat. I listed a different type of lift in my estimate that can be used on all types of surfaces. I also increased the electrical hours and the dumpster amount. I feel as if the electrical is low. The dumpsters where increased because of the types of material you'll discard. Insulation fills dumpsters quickly and metal wall panels to not pack easily into dumpsters. Despite these differences between my estimate and Liberty's August 2021 estimate, my estimate is still lower than Liberty's 2021 estimate. I feel as if the property repairs can be done in the amount of Liberty's estimate in August 2021.

Sincerely,

Tim Kelley

West Tennessee Restoration

126 Directors Row

Jackson TN 38305

731-660-9090

In the last four years I have not testified in any cases.

Deposition in the Clayborn vs. Liberty case

My Hourly rate is \$150.00 per hour. I currently have 21.87 hours, including the time to write this report.

#### Skills & Abilities

- Since April 30, 2007, I have held positions at West Tennessee Restoration from carpenter to owner. I helped create company objectives by being involved with marketing, customer service, monthly, quarterly and annual goals. By staying productive in my position I maintain a prosperous workplace.
- Experienced in motivating, hiring, training and disciplining employees.
- Quick learner with multiple certifications and licensures in every trade that
  we specialize in with a military background that helps handle situations
  swiftly and proficiently.

#### Experience

#### Kelley's Home Improvement

This was my parent's business and where I started learning restoration and remolding. My brother continues to run a portion of this business today. I worked with them many summers and weekends while in school, and any other opportunity that I had after graduating. Their company consisted of doing restoration, remodeling, and flipping houses.

#### Motor Parts and Bearing

1996 - 1998

Managed night shift employees and did the final closing Paperwork while attending high school.

#### U.S Army

8/18/1998 - 10/07/2006

I started out as a light wheel vehicle mechanic in the Army National Guard but re-classed to military police when 9/11 occurred and put on active duty. Responsibilities consisted of security, traffic enforcement, weapons transports, various criminal cases and personal relations of residents at Fort Leonard Wood MO, Schofield Barracks III, IIelo Mano III, and Wheeler Army Air Field.

Awards include-Army Achievement Medal, Army Reserve Achievement Medal, National Defense Service Medal, Global War on Terrorism Service Medal, Armed Forces Reserve Medal with M Device and Army Service Ribbon

I also held a Top Secret Security Clearance until I Was Honorably Discharged.

#### **Pro Plumbing**

1999 - 2001

This job consisted of all new construction, commercial and residential plumbing work. Some of the projects included Shoe Carnival in Jackson, TN and car washes in Jackson, Selmer, Savannah, and Munford along with multiple residential houses.

#### Cooper Heating and Air

2001-2003

This job consisted of all new construction. I oversaw laying out and digging footings based on the available blueprints, framing the houses, plumbing and the HVAC in each house. I was only at this job around six months when I was put into a lead role and ran my own jobs, while the owner ran others.

#### West Tennessee Restoration

4/30/2007-4/9/18

I started with West Tennessee Restoration, April 30° 2007, as a carpenter. Within a year I was promoted to Production Supervisor. I was in charge of production on various restoration and remodel jobs, hiring and firing, cost control, vehicle maintenance, ordering materials, and training of new employees. I also continuously looked for ways to save money, whether it is developing a more efficient way to do a certain trade, purchasing new equipment, finding better material prices, etc.

On March 12<sup>Th,</sup> 2017 I took the position as estimator. I was in charge of completing multiple estimates each week, look at new jobs daily, follow up on estimates that are out, deal directly with agencies and adjusters, and direct our two foremen in their job duties. I also helped our other two estimators when they have problems with their jobs whether it be advice on what to do or what to put into an estimate. Completing tasks in a timely manner is important to me, and to ensure that my team and I collect all jobs quickly and efficiently.

#### WTR LLC DBA West TN Restoration

4/9/18-Current

Owner of WTR LLC. As of 5/20/21 we have started and completed a total of 691 projects. These projects consisted fire, wind, water, trauma clean-up and mold damages, with a small percentage being remodel projects.

Myself and my team are trained to look for pre-existing conditions that do not pertain to the current loss. We have to be able to efficiently use the technology and tools that we have available to determine where new damage stops and preexisting damages begin. We do this with a combination of moisture meters, infrared cameras and inspecting the property.

We are often asked to determine whether contents are salvageable or non-salvageable on fire, water, mold and wind projects. We make these determinations by a combination of inspections, test cleaning and testing.

We also look for subrogation potential and have been trained to do so. This could be from previous work done that caused a loss, faulty appliances, plumbers, etc.